WHAT IS CLAIMED IS:

1. A signal processor, comprising:

a signal processing unit covered with a vacuum insulation layer in a vacuum vessel;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material, and;

an electrification controller that switches ON said heater in advance before cooling begins.

2. The signal processor according to Claim 1, wherein said signal processing unit comprises:

a band-pass filter for selecting a predetermined signal from a receiving signal input from an antenna terminal; and

a low noise amplifier for amplifying an output from said band-pass filter to a predetermined level with low noise.

3. The signal processor according to Claim 1, wherein said electrification controller comprises:

a relay that switches electrification either to said cooling mechanism or said heater; and a sequencer that controls said relay.

4. The signal processor according to Claim 1, wherein;

all or a part of wirings of said signal processing unit makes up of a superconductive material, and

said cooling mechanism has a capability to cool said signal processing unit until said superconductive material becomes in

a superconductive state.

5. The signal processor according to Claim 4, wherein said superconductive material is a high-temperature superconductor having superconductive characteristics at a high temperature.

6. A signal processor, comprising:

a signal processing unit covered with a vacuum insulation layer in a vacuum vessel;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material, and;

an electrification controller that selectively switches ON said heater when cooling begins and selectively switches ON said cooling mechanism after a predetermined condition is established.

7. The signal processor according to Claim 6, wherein "after said predetermined condition is said established" equals "after a passage of a certain period of time".

8. The signal processor according to Claim 6, wherein said signal processing unit comprises:

a band-pass filter for selecting a predetermined signal from a receiving signal input from an antenna terminal; and

a low noise amplifier for amplifying an output from said band-pass filter to a predetermined level with low noise.

9. The signal processor according to Claim 6, wherein said

electrification controller comprises:

a relay that switches electrification either to said cooling mechanism or said heater; and a sequencer that controls said relay.

10. The signal processor according to Claim 6, wherein;

all or a part of wirings of said signal processing unit makes up of a superconductive material, and

said cooling mechanism has a capability to cool said signal processing unit until said superconductive material becomes in a superconductive state.

11. The signal processor according to Claim 10, wherein said superconductive material is a high-temperature superconductor having superconductive characteristics at a high temperature.

12. A cooling method of a signal processor that comprises:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer; and

a heater that heats to activate said getter material, and wherein;

said heater is switched ON in advance before cooling begins.

13. A cooling method of a signal processor that comprises:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer; and

a heater that heats to activate said getter material, and wherein;

said heater is selectively switched ON when cooling begins and said cooling mechanism is selectively switched ON after a predetermined condition is established.

14. The cooling method of the signal processor according to Claim 13, wherein "after said predetermined condition is said established" equals "after a passage of a certain period of time".

15. The cooling method of the signal processor according to Claim 13, implementing a change-over of switching by using a sequence program.

16. A radio receiver comprising:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material; and

an electrification controller that switches ON said heater in advance before cooling begins.

17. A radio receiver, comprising:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer;

a heater that heats to activate said getter material, and;

an electrification controller that selectively switches ON said heater when cooling begins and selectively switches ON said cooling mechanism after a predetermined condition is established.

18. A cooling method of a radio receiver that comprises:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer; and

a heater that heats to activate said getter material, and wherein;

said heater is switched ON in advance before cooling begins.

19. A cooling method of a radio receiver that comprises:

a signal processing unit covered with a vacuum insulation layer;

a cooling mechanism that cools said signal processing unit;

a getter material of a heat-activation type that controls increase of gas pressure inside said vacuum insulation layer; and

a heater that heats to activate said getter material, and wherein;

said heater is selectively switched ON when cooling begins and said cooling mechanism is selectively switched ON after a predetermined condition is established.